

# Exercise 4

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## Notation

We use the same naming convention as in the previous exercise.

## Exercise 1

As expected, the program outputs the same circumference and the same area for both polygons.

## Exercise 2

The results here are also correct. We can see that the program outputs the same results for the sum of circumferences, even after executing the program many times (and therefore using different randomly initialized coordinates for polygons).

## Exercise 2

**Part 1** (`init_list`): The output results are correct, but we are not sure if the exercise was intended to be solved this way, since using lambdas does not seem to be very meaningful.

**Part 2** (`init_list`): The output results are correct. We are aware that using a global variable `nb_arg` is not a good programming practice but we could not make our implementation for the mean geometric area work without knowing `nb_arg`.